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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,713	04/19/2007	Yoshihito Ohkawa	1000023-000114	3547
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EXAMINER				
LEE, DORIS L				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
05/16/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

# Office Action Summary

**Application No.**

10/587,713

**Applicant(s)**

OHKAWA, YOSHIHITO

**Examiner**

DORIS LEE

**Art Unit**

4145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/DF)  
Paper No(s)/Mail Date 20080208, 20080728, 20080919.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-2, 4-7, and 10-13** are rejected under 35 U.S.C. 102(b) as being anticipated by **Ouchi (JP 2001-220441, see machine translation)**

**Regarding claim 1**, Ouchi teaches a flame-retardant polyamide ([0001]) composition which comprises 10 to 80% by mass of a polyamide (A) ([0010], 20 to 80%), 5 to 40% by mass of a flame retardant (B) ([0010; 5-40% brominated flame retardant), 0.5 to 10% by mass of zinc borate and at least one other salt of zinc (C)([0038], 0.1 to 10 % of zinc stannic and zinc borate and [0047]), 0 to 60% by mass of an inorganic reinforcing material (D) ([0010], 0-60% reinforcing material), and 0 to 5% by mass of a drip preventing agent (E) ([0040], 0.1 to 10%).

**Regarding claim 2**, Ouchi discloses all the limitations as set forth above. In addition, Ouchi teaches that the at least one other salt of zinc is at least one selected from zinc phosphate, zinc stannate and calcium zinc molybdate ([0038] and [0047]).

**Regarding claims 4 and 10**, Ouchi discloses all the limitations as set forth above. In addition, Ouchi teaches that the polyamide (A) comprises

100% by mole of recurring units comprising a dicarboxylic acid component unit (a-1) consisting of 30 to 100% by mole of a terephthalic acid component unit, 0 to 70% by mole of an aromatic dicarboxylic acid component unit other than terephthalic acid, and/or 0 to 70% by mole

of an aliphatic dicarboxylic acid component unit having 4 to 20 carbon atoms (provided that the total amount of these dicarboxylic acid component units is 100% by mole),

and a diamine component unit (a-2) consisting of an aliphatic diamine component unit and/or an alicyclic diamine component unit ([0010]).

**Regarding claims 5 and 11**, Ouchi discloses all the limitations as set forth above. In addition, Ouchi teaches that the polyamide (A) comprises 50 to 100% by mole of 1,6-diaminohexane with respect to the diamine component unit, and has a melting point in the range of 290 to 350°C, and an intrinsic viscosity [TI], as measured in a concentrated sulfuric acid at 25°C, in the range of 0.5 to 3 dl/g ([0019], [0025] and [0026]).

**Regarding claim 6, 7, 12 and 13**, Ouchi discloses all the limitations as set forth above. In addition, Ouchi teaches that a molded product, namely a connector, can be made with the composition as recited in claim 1 ([0001]).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 3, 8, 9 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Ouchi (JP 2001-220441, see machine translation)**.

**Regarding claims 3 and 9**, Ouchi discloses all the limitations as set forth above. In addition, Ouchi teaches that the zinc borate and at least one other salt of zinc are zinc borate and zinc phosphate ([0038]).

However, Ouchi does not explicitly teach that the mass ratio of zinc borate and zinc phosphate is 1:0.1 to 1:5.

When faced with a mixture, one of ordinary skill in the art would be motivated by common sense to select a 1:1 ratio, a ratio that falls within the presently claimed amount, absent evidence of unexpected or surprising results. Case law holds that "[h]aving established that this knowledge was in the art, the examiner could then properly rely... on a conclusion of obviousness, 'from common knowledge and common sense of the person of ordinary skill in the art within any specific hint or suggestion in a particular reference.'" *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

**Regarding claims 8 and 14**, Ouchi discloses all the limitations as set forth above.

As Ouchi discloses all the components of the instant claim, it is therefore inherent that the flame-retardant polyamide composition has flammability equivalent to V-0 as evaluated in accordance with UL94, the amount of bromine gas generated upon molding of 0.1 ppm or less, a reflow heat-resistant temperature of 260°C or higher, a toughness of 40 mJ or more, and a flow length of 60 mm or longer since such a properties are evidently dependent upon the nature of the composition used. Case law holds that a material and its properties are inseparable. *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DORIS LEE whose telephone number is (571)270-3872. The examiner can normally be reached on Monday - Thursday 7:30 am to 5 pm and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley can be reached on 571-272-1453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DLL 5/8/2008

/Basia Ridley/  
Supervisory Patent Examiner, Art Unit 4145